★HVDC= X12 92-380387/46 ★SU 1704170-A1

Conductor for aerial power transmission - consists of steel core surrounded by aluminium and aluminium alloy

HV DC POWER TRANSMISSION RES INST 90.08.22

90SU-4730944

L03 M27 (92.01.07) H01B 5/08

An electrical conductor consists of a multiple wire steel core superimposed with layers of aluminium wires and an additional layer of wires made from an alloy comprising (mass%): magnesium 0.45-0.60; silicon 0.45-0.60; iron 0.40-0.70 and balance aluminium.

The conducting element consists of a multiple wire steel core (1) surrounded by a layer of wires made from the alloy (2) and covered by at least two layers of aluminium wires (3). It has a resistance of 0.662.10 power 4 omega/m at 200 Hz.

USE/ADVANTAGE - The electrical conductor finds application in aerial power transmission. Compared to the prototype (AS-600/72) the conductor has 4% lower resistance and 11% greater tensile strength, and costs no more to produce. Bul.1/7.1.92 (3pp Dwg.No.1/2)

N92-289988 X12-D02X